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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/092,033	03/05/2002	Stephen F. Fulghum	301489.1003-113	7761

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EXAMINER

LEUBECKER, JOHN P

ART UNIT PAPER NUMBER

3739

DATE MAILED: 08/08/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

SP

<b>Office Action Summary</b>	Application No. 10/092,033	Applicant(s) FULGHUM, STEPHEN F.	
	Examiner John P. Leubecker	Art Unit 3739	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 23 May 2005.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-35 is/are pending in the application.  
4a) Of the above claim(s) 12-20 and 27-35 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11 and 21-26 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

*Claim Objections*

1. Claims 1 and 5 are objected to because of the following informalities:

As to claim 1, term “said combined light” and “the combined light” now lacks antecedent basis since such “combining” has been removed from the claim. This should be --said optically coupled light-- to conform with the amended language.

As to claim 5, the preamble should refer to a “system”, not a “method”. In addition, the word “compromises” should be --comprises--.

Appropriate correction is required.

*Claim Rejections - 35 USC § 112*

2. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

3. Claims 1-11 and 21-26 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Note reasons set forth in numbered paragraph 4 of the previous Office Action (paper number 11172004) and elaborated upon in numbered paragraph 13.

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4. Claim 7 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.

Two types of light are referred to a “reference light” in the application: normal white (e.g. red, green, blue) light used for the normal visible light image and red/infrared light used as a reference light for comparison purposes. Both are confusingly mentioned using the term “reference light” but only one is disclosed as being emitted simultaneously with the excitation light. The true reference light of red/infrared wavelengths is the one that can be emitted simultaneously with the excitation light. The reference light including red, green and blue wavelengths (which corresponds to the normal image light mode) is not disclosed as being capable of being emitted simultaneously with the excitation light.

#### *Claim Rejections - 35 USC § 103*

5. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

6. Claims 1-6, 8-11, 21, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko et al. (U.S. Pat. 5,749,830) in view of Poindexter et al. (U.S. Pat. 5,979,523) for the reasons set forth in numbered paragraph 10 of the previous Office Action, paper number 11172004.

As to the newly added limitations (that have not been previously addressed), note that the actual source of light (905) which is disclosed as a xenon light source produces red, blue, green and (with respect to claim 9), infrared. In addition, light produced by the combination of source (905) and RGB filter (918) also would include red, green and blue wavelengths.

As to claim 5, Kaneko et al. discloses in Figure 51 the situation where a sequential RGB light (note filter 918) is used with a monochromatic CCD. However, earlier in the reference, Kaneko et al. explicitly teaches that use of a simultaneous RGB (white) light with a color CCD is alternatively and equivalently used to produce the same results (note Figures 4a and 4b, col.9, lines 6-9 and col.12, lines 20-33). Since both methods are known in the art, it would be within the level of ordinary skill in the art to use either as an alternative to one another, and Kaneko et al. contemplates both for use in the disclosed fluorescence endoscope system, it would have been obvious to one of ordinary skill in the art to have modified the embodiment of Figure 51 to have used a color CCD. Where there is a limited universe of potential options, the selection of any particular option would have been obvious to one of ordinary skill in the art. In re Jones, 412 F.2d 241, 162 USPQ 224 (CCPA 1969).

7. Claim 22 is rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko et al. in view of Poindexter et al. and further in view of Perelman et al. (U.S. Pat. 6,091,984) for the reasons set forth in numbered paragraph 11 of the previous Office Action, paper number 11172004.

8. Claims 25 and 26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kaneko et al. in view of Poindexter et al. and further in view of Groner et al. (U.S. Pat. 6,104,939) for the reasons set forth in numbered paragraph 12 of the previous Office Action, paper number 11172004.

*Response to Arguments*

9. Applicant's arguments filed May 23, 2005 have been fully considered but they are not persuasive.

Applicant suggests that the Examiner is ignoring "the clear teachings of the present application" with respect to the rejection made by the Examiner under 35 U.S.C. 112, first paragraph. However, in contrast, the Examiner is using the clear teachings of the application in support that such an embodiment that uses a diode laser was not contemplated by Applicant. Clearly, because of the difference in wavelengths between a gallium nitride laser diode and the mercury arc lamp, the structure of the light source as shown in Figure 3, for example, would not be necessary since a red wavelength could not be filtered out of the laser diode light. A light source structure which uses a diode laser, in combination with the necessary structure produce the same results as the embodiment that uses the mercury arc lamp has not be mentioned, described or shown (in the Figures). A mere reference to such light source with respect to what is known in the prior art and an assertion (in Applicant's arguments) that one of ordinary skill would known how to fashion such a light source is not only non-supporting but appears to be an admission that such would be obvious and thus not a patentable feature.

In any event, in response to other arguments, the mercury arc lamp (364, Fig.3) can be considered a “stand-alone” source and such term does not specifically imply a diode laser. Furthermore, nothing in the description of Figures 11a-d and 12 imply or suggest use of a diode laser. If Applicant wants the Examiner to read the specification such that mention of a generic element (e.g., UV light source) would inherently imply a specific element (e.g., diode laser), than that is what the Examiner will do. However, he will also read the prior art that way.

Regarding the Poindexter reference, no matter what other system (i.e. gas sensor) Poindexter discloses, this reference still explicitly teaches that GaN diode lasers for generating excitation light in the UV region would be a suitable light source that would be “readily apparent to those skilled in the art” (col.2, lines 57-67).

### *Conclusion*

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

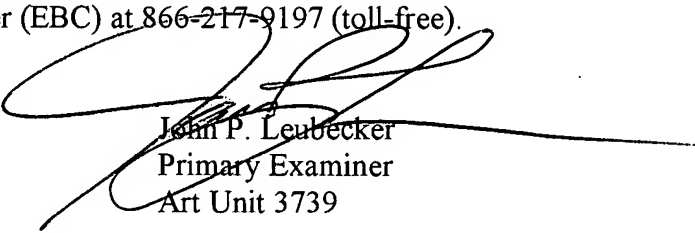
A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to John P. Leubecker whose telephone number is (571) 272-4769. The examiner can normally be reached on Monday through Friday, 6:00 AM to 2:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Linda C.M. Dvorak can be reached on (571) 272-4764. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



John P. Leubecker  
Primary Examiner  
Art Unit 3739

jpl